**Update from the LD&T (Ed Tech) Program**

Greetings once again from the former Educational Technology program at Purdue University!

The first big news of this year’s annual newsletter is front and center. We’re changing our name! Last year, we let you know that we were thinking about changing the program’s name, and we’re now in the process of making it official. Our new moniker is **Learning Design and Technology**.

So, you might ask, “What’s in a name?” Shakespeare’s famous line for Juliet argues that what we call things is arbitrary, but there is a rationale behind our name change.

We think that the term educational technology, while widely used in our field, doesn’t quite capture what it is we do as well as we’d like. To some, it connotes a K-12 only endeavor, though our work extends beyond formal education settings. It also omits the element of design that we think is so important to what we do. Finally, so much of the emphasis today is on facilitating learning, so we wanted to put learning first, literally and figuratively.

So, our new moniker is intended to reflect the fact that we design learning environments and experiences involving technology. We think it fits!

**Online Master’s Program Nearing Launch**

After three years of planning and preparations, spearheaded by Tim Newby, the LD&T faculty convener, an online master’s degree program in Learning Design and Technology is finally nearing launch. It has been quite an adventure!

By this time last year, after winding its way through the Purdue bureaucracy, the proposal for the online program had gone to the Indiana Commission for Higher Education (ICHE), which gave its approval. We thought that was the final step, but we were wrong!

The program also required the approval of Purdue’s accrediting organization, the Higher Learning Commission of the North Central Association of Colleges and Schools. That was granted last year, but too late for us to gear up for the planned fall 2010 launch. So, we are now planning to launch the online program in fall 2011.

The final decisions to be made now involve determining the fees that will be charged for the program and deciding whether to enter into an agreement with a vendor to manage marketing and student recruitment. We see real advantages to working with the vendor, which was selected through a university bid process. All that remains is to dot the i’s and cross the t’s on an agreement.

If all goes well, we will be up and running at this time next year. We look forward to the challenges and opportunities of the new online program.
PBL – Problem-Based Learning

**Peg Ertmer** continues to examine the challenges and opportunities related to teaching relevant content, particularly high school math and science, using a PBL approach.

During summer 2010, she co-taught, with **Dr. Jim Lehman**, a PBL course that helped the first cohort of **STEM Goes Rural** fellows create PBL units for their high school math and science classrooms. The fellows will implement their units during the 2010-2011 school year.

With a group of graduate students, **Dr. Ertmer** will gather data from these new teachers regarding the adaptations they need to make to address the constraints they encounter in their specific classroom settings.

**PERSISTent Research**

**Minchi Kim** and her research group (Purdue Educational Research in Scientific Inquiry and Scaffolding Technology) partnered with 7 middle and high school teachers and over 200 students to implement web-based curricular materials in science classrooms. The PERSIST group is studying how students solve scientific problems with emerging technologies, how teachers and tools provide scaffolds in dynamic classroom settings, and how web-based learning environments with simulations and games should be designed to promote authentic problem solving.

The project has garnered support through an Association of Teacher Educators-Indiana mini grant, and **Dr. Kim** has been invited to speak at the 2010 annual meeting.

Science teachers interested in participating in this project, email: minchi@purdue.edu.

**Assessing Teamwork**

**Scott Schaffer**, faculty member in Learning Design and Technology and affiliated faculty member of the Regenstrief Center for Healthcare Engineering (RCHE) at Purdue, is studying methods for assessing teams. In particular, **Dr. Schaffer** is interested in how teams learn to work together across disciplinary boundaries.

This research, funded by the National Science Foundation, focuses on student design teams in the Engineering Projects in Community Service (EPICS) program at Purdue. EPICS is a nationally recognized service learning program in which teams of undergraduates design and build systems to solve problems for local organizations.

**Dr. Schaffer** is interested in the mediating effects of self-efficacy, task complexity, and team composition on performance. LD&T graduate student **Xiaojun Chen** is a member of the research team and is focusing her dissertation work on how team members learn from constructive conflict while discussing design issues.
Partnership Focused on Engineering Design

**Johannes Strobel**, LD&T and Engineering Education faculty member and Director of INSPIRE (Institute for P-12 Engineering Research and Learning) and **Jim Lehman**, LD&T faculty member and associate dean in the College of Education, are part of a team that will be leading a new Math Science Partnership project funded by the National Science Foundation.

The project, *Science Learning through Engineering Design (SLED)*, will focus on engineering design as a vehicle for teaching science in grades 3 through 6. The project co-leaders are Brenda Capobianco, science education, and Keith Bowman, materials engineering.

Partnering in the project are Purdue's Colleges of Education, Engineering, Science, and Technology, the Discovery Learning Research Center, and the Lafayette, Tippecanoe, Taylor Community, and Plymouth schools. The project will span five years and impact about 200 teachers and 5000 students.

Drs Lehman and Strobel will work with the project’s cyber-infrastructure as well as other components of the project.

Serious Games Development

**Bill Watson**, Director of the Purdue Center for Serious Games and Learning in Virtual Environments, is continuing development on *National Pastime*, a citizenship education video game for middle and high school students that uses the experience of American citizens of Japanese descent in the internment camps of World War II to connect students to current events and the role of active citizens in a democracy. The development of the initial prototype was funded by the Electronic Software Association Foundation.

Dr. Watson is also Co-PI on a project funded by the NSA and the Defense Acquisition University involving Stevens Institute of Technology, Georgia Tech, and the University of Southern California to develop an open-source simulation for training systems engineers as well as a platform for customized, scenario-based simulation development.

Online Materials for Military Families

**Jennifer Richardson** and **Bill Watson** are collaborating with Purdue’s Military Family Research Institute (www.mfri.purdue.edu) to develop online materials for supporting the families of military personnel, part of the mission of the MFRI.

The Military Community, Family, and Youth Extension project is supported by funding from the Department of Defense. It is helping to support graduate students as well as the participation of LD&T faculty.
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Student Recognitions

Larissa Olesova and Lisette Reyes, Ph.D. students in Learning Design and Technology, are the recipients of a 2010-11 Frank B. DeBruicker Graduate Award. This award, which provides $1000 for a graduate student in the program who demonstrates research excellence, was established by the DeBruicker family in honor and memory of their father, Frank.

Two program students were among the winners at last spring’s Annual Graduate Student Educational Research Symposium (AGSERS). Angela van Barneveld and Ayesha Sadaf, both Ph.D. students in Learning Design and Technology, were selected as winners of the research poster competition. A third winner, Sara Flanagan, is a master’s graduate of the program now pursuing a PhD in special education.

J-PEER

Johannes Strobel is the editor of a newly launched journal devoted to the study of engineering thought and learning at the P-12 level. J-PEER, the Journal of Pre-College Engineering Education Research, is published by the Purdue University Press and sponsored by INSPIRE, the Institute for P-12 Engineering Research and Learning. Dr. Strobel is the Director of INSPIRE and an LD&T and ENE faculty member. The new journal is open access and double-blind peer reviewed. It will serve as an outlet for research related to pre-college engineering education. You can visit the journal’s website at http://docs.lib.purdue.edu/jpeer.

Help Support the Program

Are you interested in helping to support the efforts of the Learning Design and Technology program? Please consider making a tax-deductible donation. Your support would mean a lot! You can donate specifically to the LD&T program by specifying that your gift go to the ECID Gift Fund. These funds can support things such as graduate student travel to professional conferences, recruiting activities, seed funding for research projects, and much more.

For more information, see http://www.education.purdue.edu/about_us/giving.html